BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	
Rural Digital Opportunity Fund;	WC Docket No. 19-126
Connect America Fund.	WC Docket No. 10-90

COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION

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I. INTRODUCTION

The California Public Utilities Commission (CPUC) submits these comments in response to the above-captioned *Notice of Proposed Rulemaking* (*NPRM*).[1] In the *NPRM*, the Federal Communications Commission (FCC) seeks comment on the establishment of a Rural Digital Opportunity Fund (RDOF) to subsidize the development and operation of broadband telecommunications networks in defined rural areas of the United States.

California is a national leader in state support for broadband deployment and adoption and has several programs and organizations promoting broadband deployment and adoption in the state.[2] Since its establishment in 2007[3], the California Advanced Services Fund (CASF) has awarded $266 million in total grants and loans in its various programmatic areas.[4] During this same period, the CPUC launched one of the first state broadband mapping programs in the nation, and has continued to manage this

[1] In the Matter of Rural Digital Opportunity Fund; Connect America Fund, *Notice of Proposed Rulemaking*, WC Docket Nos. 10-90, 19126 (rel. August 2, 2019) (*NPRM*).

[2] These programs and partners include: The California Advanced Services Fund (CASF), the California Teleconnect Fund (CTF), the California Telehealth Network (CTN), the California Emerging Technology Fund, and the California Broadband Council.

[3] *See*, CPUC Order Instituting Rulemaking into the Review of the California High Cost Fund B Program 06-06-028, *Interim Opinion Implementing California Advanced Services Fund*, [Decision 07-12-054] (2007).

[4] *See*, *2018 Annual Report: California Advanced Services Fund*, California Public Utilities Commission – Communications Division, rel. April 2019, available at https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/About_Us/Organization/Divisions/Office_of_Governmental_Affairs/Legislation/2019/CASF%202018%20Annual%20Report%20April%202019.pdf

initiative following the end of federal funding in 2014.[5]

The CPUC also represents California as one of eight states partnering with the National Telecommunications and Information Administration (NTIA) to provide a best practices model for the improvement of broadband mapping processes.[6] The CPUC and other California agencies continue to cooperate with other federal broadband programs, including the NTIA's State Broadband Leaders Network (SBLN),[7] the U.S. Department of Agriculture's ReConnect Pilot Program,[8] and the Universal Service Administrative Company (USAC).[9]

The CPUC's experience managing both state level broadband infrastructure funding and broadband mapping programs over the past decade informs the proposal for a federal-state collaborative approach in the implementation of the RDOF program.

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[5] The CPUC's Communications Division was an awardee of the NTIA's State Broadband Initiative (SBI) program in 2009 to begin federal funding of California's broadband mapping operation. The NTIA issued a second award to the CPUC in 2010, for total SBI funding to California of $7,981,304, up through 2014. *See*, https://www2.ntia.doc.gov/grantee/california-public-utilities-commission.

[6] *See*, *NTIA Partners with 8 States on Improvements to Broadband Availably Mapping,* (February 12, 2019), available at https://www.ntia.doc.gov/press-release/2019/ntia-partners-8-states-improvements-broadband-availability-map.

[7] The CPUC is also a member of NTIA's State Broadband Leadership Network (SBLN). SBLN is a collaboration among NTIA and some 30 states with active broadband programs, or programs in formation. *See*, https://broadbandusa.ntia.doc.gov/ntia-resources/state-broadband-leaders-network-sbln.

[8] California Governor Gavin Newsom registered state compliance with state support conditions of the ReConnect broadband development pilot program of the US Department of Agriculture, Rural Utilities Service (USDA-RUS) in a letter dated June 3, 2019, available at https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2019/06/GGN-Sec.-Perdue-Letter-June-7-2019.pdf

[9] The CPUC's Communications Division is the authorized agent for California's access to the HUBB State Access Tool, through which USAC allows states to monitor and download deployment filings made by Connect America Fund awardees.

These recommendations will advance the FCC's stated purposes for establishing the RDOF Program.

These comments address many, but not all, of the issues raised by the *NPRM*. Silence on any particular issue should not be construed as agreement or disagreement. The CPUC reserves the right to comment further in the reply round.

II. DISCUSSION

The FCC seeks comment on its overall approach in establishing the RDOF, and proposes a framework guided by the following goals: (1) ensuring that high-speed broadband is made available to all Americans quickly, and at an affordable price; (2) reducing waste and inefficiency in the high-cost program and promoting the use of incentive-based mechanisms to award support; (3) requiring accountability to ensure that public investments are used wisely to deliver intended results; and (4) minimizing the contribution burden.[10]

A. Implementation of the Rural Digital Opportunity Fund

While the CPUC supports the creation of the RDOF, as an initial matter, the CPUC strongly opposes the launch of the RDOF's competitive bid, funding award, and disbursement processes for any public funds until the FCC improves the broadband availability data collection process and develops better broadband coverage maps. This is critically important for California, a large state with both significant rural areas and a substantial population living in areas unserved by broadband.

[10] *NPRM*, at ¶ 13.

The developer of the FCC's Connect America Cost Model, on which the federal Connect America Fund (CAF) itself is based, estimates there are 984,878 California residents living in rural and suburban housing units with an unserved broadband availability status of less than 25 Megabits per second (Mbps) downstream and 3 Mbps upstream (25/3).[11] This number becomes extremely significant for California's broadband development and the federal funding needed to bring broadband services to all Californians when we examine the critical issue of broadband mapping inaccuracy.

As recently as last week, sworn congressional testimony stated that broadband mapping inaccuracy "undercounts" (of rural locations eligible for funding) may run as high as 38 percent when current FCC data and mapping protocols are used.[12] This percentage suggests that of the estimated 984,878 Californians with less than 25/3 Mbps, more than 300,000 Californians could be missed for funding under the RDOF program.

Furthermore, the CPUC recommends the FCC address the issue of affordability by implementing low-income broadband plans in the RDOF. The *NPRM* makes multiple statements on ensuring affordable services yet it does not contain any proposal to address affordability.[13] The RDOF will distribute billions in public funding to build network infrastructure. To ensure customers can afford the services of the publicly funded

[11] Taken from Cost Quest Associate's State Broadband Dashboard, 984,878 is the sum of Rural Unserved Residential Population (766,456) and Suburban Unserved Residential population (218,422). *See State Broadband Dashboard*, California; Cost Quest Associates (rel. August 1, 2019; Updated September 16, 2019 with FCC Form 477 data of December 2017, v2), available at https://www.costquest.com/resources/state-broadband-dashboard.

[12] Testimony of James W. Stegman, President of Cost Quest Associates, House Subcommittee on Communication and Technology, September 11, 2019 https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Stegeman_Testimony%20%2BAppend.%20B-C_0.pdf

[13] *NPRM*, ¶ 12, 13, and at p. 65.

networks, the FCC should incentivize providers to offer low-income broadband plans to address affordability of broadband services. The CPUC's own broadband deployment program, the California Advanced Services Fund, offers additional funding for projects that offer low-income plans at $15 per month.[14] The FCC could incent providers to offer low-income broadband plans in several ways including adjusting the reverse auction bidding structure to provide incentives for low-income service tiers, prioritizing applications that offer low-income broadband plans, and/or allocating more funding to projects, within the reverse auction framework, that offer low-income broadband plans. The FCC will fail to address the digital divide issue unless it ensures that the residents of the communities benefitting from the RDOF can afford the services offered through these publicly funded networks.

The CPUC therefore urges our federal partners at the FCC to take the time to continue to focus on getting the broadband data collection process right, and to work with California and other states to make broadband services subsidized by the RDOF truly affordable for all Americans.

B. Federal – State Partnership

The CPUC applauds the FCC for acknowledging that the Universal Service Fund (USF) is a federal-state partnership, and for asking how the RDOF can facilitate that partnership.[15] The CPUC recommends that the final rules for the RDOF include an option for states to pursue a federal-state partnering approach, similar to the one

[14] The CASF offers 10 percent additional funding if a provider offers a $15/month low-income plan.

[15] *NPRM*, at ¶ 13.

authorized for the State of New York. There, the FCC granted a petition filed by New York seeking waiver of the Connect America Phase II auction program rules to allow use of Phase II support in eligible areas in New York in coordination with New York's New NY Broadband Program.[16]

To establish this option for interested states, the FCC should take additional input in this docket before issuing a final RDOF Order. The option can be based on the waiver the FCC granted to New York in 2017. The New NY Broadband Program is a successful model for a federal-state broadband funding partnership.[17] Allowing California and other interested states to directly leverage federal funding like New York will support the development of new and upgraded broadband networks where they are most needed across rural America. The CPUC Staff collect and validate broadband deployment data to better understand the digital divide in rural California. This state-level expertise and data combined with federal expertise and funding can further ensure the areas that need broadband deployment receive it.

Like with the New NY Broadband Program partnership, before RDOF support is authorized, the FCC should ensure that winning bidders have met FCC eligibility requirements, as well as FCC technical and financial qualifications. Within this framework, states could contribute their own levels of funding support in order to provide

[16] In the Matter of Connect America Fund; ETC Annual Reports and Certifications, *Order*, WC Docket Nos. 10-90, 14-58 (FCC 17-2) (2017) (*New York Waiver Order*).

[17] The New NY Broadband Program was established in 2015 with an appropriation of $500 million in economic developmental funds to support carriers and providers developing broadband networks in the underserved and unserved areas of New York State. The FCC supplemented the Program with $170 million from the CAF II after granting the waiver to New York State. The Program administers the reverse auctions and awardee oversight though an extensive set of rules established by the state, in conjunction with FCC rules.

for more funded locations, higher delivered speed tiers, and greater public sector support to attract providers. CPUC believes at this time, without further information on the record, that each state opting into the RDOF federal-state partnership would manage its own reverse auction based on FCC RDOF rules, as seen in the New York State model. However, CPUC recommends that FCC solicit specific comments in this regard from states and other interested parties.

The CPUC recognizes that not all states will have either the desire or the programmatic capacity to opt-in to the partnership process. However, there are approximately thirty states that have or are developing a broadband program.[18] This suggests allowing states to opt-in for federal funding is a viable way to increase overall funding for broadband infrastructure. Allowing states to leverage federal funding will result in federal and state funding working together to address the digital divide rather than in their own sphere.

C. Incentive for Broadband Service Speeds Above 25/3 Mbps

The *NPRM* proposes to allocate higher funding as incentive for providers to build rural broadband networks that deliver broadband speeds above the 25/3 Mpbs threshold.[19] The *NPRM's* proposed tiered structure contains a logical progression of incentives and

[18] *See*, NTIA, State Broadband Leaders Network, *State Broadband Programs*, Summer 2018, available at https://broadbandusa.ntia.doc.gov/ntia-resources/state-broadband-leaders-network-sbln#contententarea; The Pew Charitable Trusts, *State Broadband Policy Explorer*, July 31, 2019, available at https://www.pewtrusts.org/en/research-and-analysis/data-visualizations/2019/state-broadband-policy-explorer.

[19] *NPRM*, at ¶ 25.

provides transparency to bidders.[20] The CPUC supports this proposal to provide higher funding for broadband networks that deliver service above the 25/3 Mbps threshold.

The fact that the RDOF will distribute public funds carries with it an obligation that such funds deliver network infrastructure capable of supporting the ever-increasing demands for broadband speed and throughput of residents, businesses, and community anchor institutions. While 10/1 was the minimally required service tier for the CAF II deployments at the time, it is now considered an outmoded level of broadband service, as the FCC recognizes.[21]

D. Use of the Reverse Auction Process

The FCC proposes modeling the RDOF on the reverse auction process used in Auction 903 of the Connect America Fund, Phase II (CAF II) Auction 903.[22] The CPUC generally endorses the FCC's proposed reverse auction framework for the RDOF, based on its success in CAF II Auction 903.[23]

Published research confirms that the reverse auction process has proven to produce more robust higher speed networks at lower deployment costs nationally than those suggested by the CAF cost model. The National Regulatory Research Institute

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[20] *NPRM*, at ¶ 23.

[21] In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, *2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment*, GN Docket No. 14-126 (rel. February 4, 2015).

[22] *Phase II Auction Order*, 31 FCC Rcd at 5978-79; *Connect America Fund Phase II Auction Scheduled for July 24, 2018 Notice and Filing Requirements and Other Procedures for Auction 903*, AU Docket No. 17-182; WC Docket No. 10-90 (rel. February 1, 2018).

[23] *NPRM*, at ¶ 19.

(NRRI) published a paper by economic consultant Joseph Gillan in April 2019, noting that the results of Auction 903 are significant. "The two defining metrics that measure the success of the CAF II are: (1) the total support awarded by the auction ($148.8 million/year) is 70% less than the amount of the Connect America Cost Model (CAM) estimated would be needed, and (2) the number of unserved locations in the territories of the price cap ILECs will decline by almost 75% once the CAF Auction winners begin offering service."[24]

While the CPUC supports the reverse auction framework, the CPUC urges the FCC to determine, based on the final Auction 903 awards and bidder certifications, if 1) existing protections against gaming the system of reverse auctions are successfully supporting competitive bidding, and 2) existing applicant and awardee screens for financial and technical qualifications are in place to prevent award defaults. The FCC should take the time to review Auction 903 results and adjust rules that will protect public funds. Any changes to rules should be circulated for comment prior to the final RDOF implementation Order.

The CPUC recommends that the FCC allow for an analysis of the Auction 903 awards in order to understand why some low-density rural areas in CAF II did not receive bids.[25] This analysis may lead to the need to adjust auction incentives. The FCC should publish data on final Auction 903 awards and certifications, with census block and

[24] Joseph Gillan, *Lessons from the CAF II Auction and the Implications of Rural Broadband Deployment and the IP Transition*, NRRI Insights, April 2019, available at https://www.naruc.org/nrri/nrri-library/nrri-insights/.

[25] *See, e.g.*, Carol Mattey, *Reaction to Joe Gillan's Paper*, NRRI Insights, *id*., at p. 9.

location counts on a state-by-state basis, itemizing areas in each state that were on offer, but for which no winning bid was awarded. This will allow states and other stakeholders to examine and analyze the areas that did not receive federal funding through Auction 903.

E. Increased Support Levels for Tribal Lands

The *NPRM* asks for comments on increased levels of support for provider networks designed to deliver broadband in Tribal areas, within the reverse auction process.[26]

The CPUC recommends a bidding credit of 35 percent for projects that will serve Tribal census blocks. California has 109 federally recognized Native American Tribes.[27] Many California Tribes have land holdings comprising small tracts, with very low population densities. Tribal lands are also scattered throughout the state and are non-contiguous. The CPUC's Communications Division has mapped all such Tribal lands in the state, with overlays for broadband served status and carrier of last resort service areas. Appendix 1 is an example of such a map. The FCC has previously authorized 35 percent bidding credit in the context of spectrum auctions.[28] The CPUC believes it should adopt this level of bidding credit to incent providers to serve Tribal lands.

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[26] *NPRM*, at ¶¶ 62-64.

[27] Indian Health Service, California Area, *List of Federally-Recognized Tribes in CA*, February 1, 2019, available at https://www.ihs.gov/california/index.cfm/tribal-consultation/resources-for-tribal-leaders/links-and-resources/list-of-federally-recognized-tribes-in-ca/?mobileFormat=0.

[28] *NPRM*, at ¶ 63.

III. CONCLUSION

The CPUC appreciates this opportunity to comment on the proposed RDOF program. While the CPUC supports the creation of the RDOF, we reiterate our recommendation that the FCC improve its broadband data collection and mapping prior to issuing final rules for the RDOF. The FCC should implement low-income broadband plans in the RDOF to ensure services provided by RDOF funded networks are affordable. The FCC should also allow states to opt-in to receive RDOF funding. As the designated manager of a state broadband program working with the challenges of vast rural areas, and an unserved broadband population of over 1.5 million, the CPUC particularly looks forward to developing a federal-state partnership to find solutions to California's rural digital divide.

Respectfully submitted,

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APPENDIX 1


STATE OF CALIFORNIA
American Indian Area Geography
OREGON
NEVADA
MEXICO
Tribal Lands
Smith River
Elk Valley
Karuk
Quartz Valley
Quartz Valley
Resighini
Yurok
Karuk
Big Lagoon
Trinidad
Hoopa Valley
Blue Lake
Table Bluff
Rohnerville
Fort Bidwell
XL Ranch
Cedarville
Alturas
Lookout
Likely
Big Bend
Roaring Creek
Pit River
Redding
Susanville
Greenville
Susanville
Round Valley
Round Valley
Paskenta
Laytonville
Grindstone
Mechoopda
Sherwood Valley
Enterprise
Mooretown
Sherwood Valley
Redwood Valley
Colusa
Pinoleville
Upper Lake
Big Valley
Cortina
Auburn
Manchester
Point Arena
Auburn
Stewarts Point
Middletown
Rumsey
Shingle Springs
Woodfords
Ione Band of Miwok
Jackson
Bridgeport
Lytton
Tuolumne
Benton Paiute
Bishop
Picayune
North Fork
Big Pine
Big Sandy
Table Mountain
Fort Independence
Lone Pine
Timbi-Sha Shoshone
Timbi-Sha Shoshone
Santa Rosa
Tule River
Pacific Ocean
Santa Ynez
Fort Mojave
Fort Mojave
Chemehuevi
Colorado River
San Manuel
Twenty-Nine Palms
Morongo
Soboba
Agua Caliente
Santa Rosa
Cabazon
Cahuilla
Torres-Martinez
Rechanga
Pala
La Jolla
Los Coyotes
Santa Ysabel
Barona
Inaja and Cosmit
Capitan Grande
Ewiiaapaayp
Sycuan
Manzanita
Jamul
Campo
Fort Yuma
N
W
E
S
0
50
100 Miles
0
75
150 Km
Data Sources:
(1) U.S. Census Bureau AIAN.
(2) FCC Study Area Boundaries of Incumbent Local Exchange Carriers (ILECs), April 2014.
Map prepared by the CPUC, Communications Division, Video Franchising and Broadband Analysis Section, September 19, 2019.